

CLAIMS

What is claimed is:

- 5 1. In a computerized device, a method for allowing a content subscriber to access presence information comprising:
- receiving, from the content subscriber, a subscription request for presence information;
- inserting an address within a notification message in response to receiving the
- 10 subscription request, the address relating to presence information transmitted using a one-to-many transmission channel; and
- transmitting the notification message to the content subscriber, the address of the notification message allowing the content subscriber to subscribe to the presence information using the one-to-many transmission channel.
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2. The method of claim 1 wherein the step of inserting further comprises inserting an address identifier within the notification message, the address identifier indicating the availability of the address within the notification message.
- 20 3. The method of claim 1 wherein the step of inserting comprises inserting a plurality of addresses within the notification message, each of the plurality of addresses relating to presence information transmitted using a corresponding one-to-many transmission channel.
- 25 4. The method of claim 1 wherein the step of receiving comprises receiving a plurality of subscription requests for presence information from a plurality of content subscribers and further comprising:
- detecting a size characteristic of the plurality of content subscribers;
- comparing the size characteristic to a threshold condition; and

when the size characteristic of the plurality of content subscribers is greater than the threshold condition, the step of transmitting comprises transmitting the notification message to a portion of the content subscribers, the address of the notification message allowing the portion of the content subscribers to subscribe to the presence information
5 using the one-to-many transmission channel.

5. The method of claim 4 further comprising:

transmitting a nullify notification message to a content subscriber subscribed to the presence information using the one-to-many transmission channel, the nullify
10 notification message having a one-to-one address relating to presence information transmitted using a one-to-one transmission channel; and

receiving a second subscription request from the content subscriber for presence information using the one-to-one transmission channel.

15 6. The method of claim 1 further comprising receiving an unsubscribe message from the content subscriber in response to transmitting the notification message, the unsubscribe message indicating unsubscription from a one-to-one transmission channel for reception of the presence information and subscription to the one-to-many transmission channel for reception of the presence information.

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7. The method of claim 1 wherein:

the step of inserting comprises inserting the address within the notification message in response to receiving the subscription request, the address relating to presence information transmitted using a multicast transmission channel; and

25 the step of transmitting comprises transmitting the notification message to the content subscriber, the address of the notification message allowing the content subscriber to subscribe to the presence information using the multicast transmission channel.

8. A computerized device comprising:

at least one communications interface;

a controller; and

an interconnection mechanism coupling the at least one communications interface

5 and the controller;

wherein controller is configured to:

receive, from the content subscriber, a subscription request for presence
information;

10 insert an address within a notification message in response to receiving the
subscription request, the address relating to presence information transmitted using a one-
to-many transmission channel; and

transmit the notification message to the content subscriber, the address of the
notification message allowing the content subscriber to subscribe to the presence
information using the one-to-many transmission channel.

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9. The computerized device of claim 8 wherein the controller, when inserting, is
configured to insert an address identifier within the notification message, the address
identifier indicating the availability of the address within the notification message.

20 10. The computerized device of claim 8 wherein the controller, when inserting, is
configured to insert a plurality of addresses within the notification message, each of the
plurality of addresses relating to presence information transmitted using a corresponding
one-to-many transmission channel.

25 11. The computerized device of claim 8 wherein the controller, when receiving, is
configured to receive, via the at least one communications interface, a plurality of
subscription requests for presence information from a plurality of content subscribers and
wherein the controller is further configured to:

detect a size characteristic of the plurality of content subscribers;

compare the size characteristic to a threshold condition; and

when the size characteristic of the plurality of content subscribers is greater than the threshold condition, the controller, when transmitting, is configured to transmit, via the at least one communications interface, the notification message to a portion of the content subscribers, the address of the notification message allowing the portion of the content subscribers to subscribe to the presence information using the one-to-many transmission channel.

12. The computerized device of claim 11 wherein the controller is further configured to:
transmit, via the at least one communications interface, a nullify notification message to a content subscriber subscribed to the presence information using the one-to-many transmission channel the nullify notification message having a one-to-one address relating to presence information transmitted using a one-to-one transmission channel; and
receive, via the at least one communications interface, a second subscription request from the content subscriber for presence information using the one-to-one transmission channel.

13. The computerized device of claim 8 wherein the controller is further configured to receive an unsubscribe message from the content subscriber in response to transmitting the notification message, the unsubscribe message indicating unsubscription from a one-to-one transmission channel for reception of the presence information and subscription to the one-to-many transmission channel for reception of the presence information.

14. The computerized device of claim 8 wherein the controller is configured to:
when inserting, insert the address within a notification message in response to receiving the subscription request, the address relating to presence information transmitted using a multicast transmission channel; and
when transmitting, transmit the notification message to the content subscriber, the address of the notification message allowing the content subscriber to subscribe to the

presence information using the multicast transmission channel.

15. A computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a controller in a computerized device having a coupling to at least one communications interface provides a method for performing the operations of:

receiving a subscription request, from the content subscriber, for presence information;

- inserting an address within a notification message in response to receiving the subscription request, the address relating to presence information transmitted using a one-to-many transmission channel; and

transmitting the notification message to the content subscriber, the address of the notification message allowing the content subscriber to subscribe to the presence information using the one-to-many transmission channel.

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16. A computerized device comprising:

at least one communications interface;

a controller; and

- an interconnection mechanism coupling the at least one communications interface and the controller;

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wherein the computerized device is configured to allow a content subscriber to access presence information, such means including:

means for receiving, from the content subscriber via the at least one communications interface, a subscription request for presence information;

- means for inserting an address within a notification message in response to receiving the subscription request, the address relating to presence information transmitted using a one-to-many transmission channel; and

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means for transmitting, via the at least one communications interface, the notification message to the content subscriber, the address of the notification message

allowing the content subscriber to subscribe to the presence information using the one-to-many transmission channel.

17. In a content subscriber, a method for accessing presence information comprising:

5 transmitting a first subscription request for presence information to a computerized device;

 receiving, in response to transmitting the subscription request, a notification message from the computerized device, the notification message having an address relating to presence information transmitted using a one-to-many transmission channel;

10 and

 transmitting a second subscription request for presence information using the one-to-many transmission channel.

18. The method of claim 17 wherein the step of receiving further comprises receiving an address identifier within the notification message, the address identifier indicating the availability of the address within the notification message and further comprising:

 examining the address identifier;

 when identifying the address identifier in response to examining, utilizing the address to transmit the second subscription request for presence information using the one-to-many transmission channel; and

 when not identifying the address identifier in response to examining, disregarding the address.

19. The method of claim 17 further comprising transmitting an unsubscribe message to the presence server in response to receiving the notification message, the unsubscribe message indicating unsubscription from a one-to-one transmission channel for reception of the presence information and subscription to the one-to-many transmission channel for reception of the presence information.

20. The method of claim 17 wherein the step of receiving comprises receiving a notification message from the computerized device, the notification message having a plurality of addresses, each of the plurality of addresses relating to presence information transmitted using a corresponding one-to-many transmission channel and further
5 comprising selecting a one-to-many transmission channel for reception of the presence information.

21. The method of claim 17 wherein:
the step of receiving comprises receiving, in response to transmitting the
10 subscription request, a notification message from the computerized device, the notification message having an address relating to presence information transmitted using a multicast transmission channel; and
the step of transmitting a second subscription request comprises transmitting the second subscription request for presence information using the multicast transmission
15 channel.

22. A content subscriber comprising:
at least one communications interface;
a controller; and
20 an interconnection mechanism coupling the at least one communications interface and the controller;
wherein controller is configured to:
transmit, via the at least one communications interface, a first subscription request for presence information to a computerized device;
25 receive, via the at least one communications interface, in response to transmitting the subscription request, a notification message from the computerized device, the notification message having an address relating to presence information transmitted using a one-to-many transmission channel; and
transmit, via the at least one communications interface, a second subscription

request for presence information using the one-to-many transmission channel.

23. The content subscriber of claim 22 wherein the controller, when receiving, is further configured to receive, via the at least one communications interface, an address identifier within the notification message, the address identifier indicating the availability of the address within the notification message, computerized device further configured to:
- examine the address identifier;
 - when identifying the address identifier in response to examining, utilize the address to transmit the second subscription request for presence information using the one-to-many transmission channel; and
 - when not identifying the address identifier in response to examining, disregard the address.

24. The content subscriber of claim 22 wherein the controller, when receiving, is configured to receive, via the at least one communications interface, a notification message from the first computerized device, each of the plurality of addresses relating to presence information transmitted using a corresponding one-to-many transmission channel and wherein the controller is further configured to select a one-to-many transmission channel for reception of the presence information.

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25. The content subscriber of claim 22 wherein the controller is further configured to transmit an unsubscribe message to the presence server in response to receiving the notification message, the unsubscribe message indicating unsubscription from a one-to-one transmission channel for reception of the presence information and subscription to the one-to-many transmission channel for reception of the presence information.

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26. The content subscriber of claim 22 wherein the controller:

- when receiving, is configured to receive, in response to transmitting the subscription request, a notification message from the computerized device, the

notification message having an address relating to presence information transmitted using a multicast transmission channel; and

when transmitting, is configured to transmit a second subscription request for presence information using the multicast transmission channel.

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27. A computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a controller in a computerized device having a coupling to at least one communications interface provides a method for performing the operations of:

10 transmitting a first subscription request for presence information to a computerized device;

receiving, in response to transmitting the subscription request, a notification message from the computerized device, the notification message having an address relating to presence information transmitted using a one-to-many transmission channel;

15 and

transmitting a second subscription request for presence information using the one-to-many transmission channel.

28. A content subscriber comprising:

20 at least one communications interface;

a controller; and

an interconnection mechanism coupling the at least one communications interface and the controller;

25 wherein the computerized device is configured to produce a means for accessing presence information, such means including:

means for transmitting, via the at least one communications interface, a first subscription request for presence information to a computerized device;

means for receiving, via the at least one communications interface and in response to transmitting the subscription request, a notification message from the computerized

device, the notification message having an address relating to presence information transmitted using a one-to-many transmission channel; and

means for transmitting, via the at least one communications interface, a second subscription request for presence information using the one-to-many transmission

5 channel.